

Remarks

The various parts of the Office Action (and other matters, if any) are discussed below under appropriate headings.

Information Disclosure Statement

The Examiner's comment that the specification is not a proper information disclosure statement is noted with appreciation. In this regard, the Examiner observes that US 5219046 is mentioned on page 2 of the specification but is not listed in the Information Disclosure Statement submitted by applicant. This is true, but US 5219046 corresponds to EP 0555819 as indicated in the PCT search report and EP 0555819 was listed in the Information Disclosure Statement. Consequently, US 5219046 is cumulative and need not be listed on the Information Disclosure Statement.

Drawings

The Examiner indicated that Figure 1 should be designated by a legend such as "Prior Art". A replacement drawing sheet is submitted herewith where such a legend has been added.

Specification

The specification has been amended to correct the informalities kindly noted by the Examiner.

Claim Rejections - 35 USC § 102

The claims were rejected as being anticipated by US 3887047 (Harnish). Harnish discloses in Fig. 2 a brake wear adjuster including an expansion member 72 and a tube 58. The tube, near its end, is formed with an annular crimp 78.

While at first glance one might think the crimp 78 functions like the swaged tube end described in applicant's specification, a review of Harnish reveals that the crimp serves an entirely different function. The crimp functions as a stop for the expansion member 72.

The opposite end of inner tubular member 58 is provided with a radially inwardly deformed portion or annular crimp 78 that serves as a stop for button 72 to limit axial movement thereof through tubular member 58 as will be described.

Harnish, column 3, lines 19-23. Upon the expansion member 72 engaging the stop, further movement of the expansion member relative to the tube 58 is stopped. At that point, further adjustment is provided by an outer tubular member 60 which is deformed radially outwardly by a ring 82 drawn therethrough by the tube 58.

As wear of the linings 27, 36 and 43 progresses, an application of the brake results in axial displacement of button 72 through tubular member 58 in the above-mentioned manner until the button 72 engages annular crimp 78 whereupon further movement of button 72 relative to tubular member 58 is prevented. Further compensation for wear of the linings 27, 36 and 43 is provided by outer tubular member 60 which is deformed radially outwardly by ring 82 which is drawn axially therethrough by inner tubular member 58 which follows pressure plate 42. (emphasis added)

Harnish, column 4, lines 38-47.

Thus, Harnish solves the problem of extending brake adjustment life by providing a second adjustment device in addition to a first adjustment device utilizing an adjustment tube and expansion member. Upon the expansion member engaging the stop (annular crimp 78), further adjustment is provided by the outer tubular member 60 which is deformed by the ring 82.

Harnish, therefore, teaches away from the subject matter of claims 1 and 11 that provide for the extension of the usable portion of the continuous tube.

As discussed in applicant's specification on page 8, in the past continuous adjuster tubes were cylindrical along the operative length thereof. As the expansion ball neared the end of the continuous tube, the resistance to movement of the ball would decrease because of a reduction in hoop strength of the tube. In accordance with the present invention, the end portion of the continuous tube can be processed to increase the hoop strength or otherwise increase the resistance to travel of the ball at the end portion of the continuous tube, thereby to extend the usable portion of the continuous tube. The end portion of the continuous tube can be processed to give the tube over its entire length a more uniform resistance to movement of the ball as the ball is drawn through the processed end portion.

In the Harnish adjuster, there is no extension of the useful life of the tube 58 vis-a-vis the expansion member 72. The crimp 78 functions as a stop that prevents the expansion member from being drawn further through the tube 58.

Accordingly, Harnish does not disclose or suggest an adjuster assembly for adjusting the release clearance between selectively engageable friction parts to compensate for wear in such parts, comprising *inter alia* a continuous tube and an expansion member together having a combined length controlling the release clearance of the selectively engageable friction parts, wherein the continuous tube has an end portion processed differently from the balance of the continuous tube for extending the usable portion of the continuous tube.

The above-discussed distinction is now further emphasized by way of the amendments made to the claims 1 and 11. The end of the tube is not processed differently to provide a stop but rather to extend the usable portion of the tube that is expanded by the expansion device to compensate for wear of the friction parts.

Claim 10 has been amended to specify that the second end is provided with an inward swage, such that the second end tapers to and terminates at a diameter which is smaller than the major tube diameter. This is neither disclosed nor suggested by Harnish.

Claims 2 and 12 have been amended to change "flared end portion" to "shaped end portion" inasmuch as there is no prior reference to "flared end portion".

Conclusion

In view of the foregoing, request is made for timely issuance of a notice of allowance.

Respectfully submitted,

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